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ABSTRACT

In-depth interviews with a randomly selected sample of 192 University of Washington faculty members who reported conducting scholarly research investigated their need for and utilization of a number of university support services. Users were asked to evaluate the services they had used, to identify any problems encountered, and to suggest resolutions to problems. Eighty-six percent of the respondents had received research funding from off-campus agencies. Use of services ranged from a low of 17 percent for "editorial assistance" to 68 percent for "clerical/secretarial assistance" and 70 percent for "duplicating services." Ratings of the quality of services ranged from a high of 1.8 to a low of 2.8 on a 5-point scale. Primary source of services was identified as the department. Most often requested additional services were types of technical assistance in proposal development. Only 85 major problems were cited, although certain specific difficulties were named by varying numbers of respondents in each service unit. Forty-one percent of respondents feel that support provided from overhead is inadequate, with 27 percent considering it as giving partial support. There were numerous requests for more and better information on university procedures and regulations. The majority of respondents report spending more than 30 percent of their research time in teaching or supervising students. Eighty percent say that they receive support and encouragement from their department or from the university in seeking research funding. (Author/SW)

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Faculty Opinion on University Research Support Services

Judith Fiedler

SUMMARY

In-depth interviews with a randomly selected sample of 192 UW faculty members who reported conducting scholarly research investigated their need for and utilization of a number of University support services. Users were asked to evaluate the services they had used, to identify any problems encountered, and to suggest resolutions to problems. Eighty-six percent of the respondents had received research funding from off-campus agencies. Use of services ranged from a low of 17% for "Editorial assistance" to 68% for "Clerical/secretarial assistance" and 70% for "Duplicating services." Ratings of the quality of services used ranged from a high of 1.8 to a low of 2.8 on a 5-point scale. Primary source of services was identified as the department. Most often requested additional services were types of technical assistance in proposal development. Only 85 major problems were cited, in general, although certain specific difficulties were named by varying numbers of respondents in each service unit. Forty-one percent of respondents feel that support provided from overhead is inadequate, with 27% considering it as giving partial support. There were numerous requests for more and better information on University procedures and regulations. The majority of respondents report spending more than 30% of their research time in teaching or supervising students. Eighty percent say that they receive support and encouragement from their department or from the University in seeking research funding.

EAC Project Number: 620

Introduction

Faculty members at the University of Washington, as at other major universities, conduct scholarly research. To a very great extent, these efforts are supported by funding from agencies outside the University, in the form of research grants or contracts. This so-called "sponsored" research does not differ essentially from research internally funded by the University except in its source of support, and individual faculty members may conduct studies under either or both types of funding. Both sponsored and internally funded research projects must follow University procedures for management, accounting and reporting. In addition, of course, projects supported by agencies outside the University may fall under special operating requirements of their funding sources.

To facilitate research activities, faculty members routinely call upon a number of support services provided by the UW. In some cases, the services they need do not exist, are inadequate, or are unknown to them. Familiarity with what is available, moreover, does not mean that researchers use, or are necessarily satisfied with, the services provided. And there is a deep suspicion, not always unwarranted, on the part of many faculty members that University procedures, if not designed to, at least in practice do, act to impede research. As part of its study of faculty research activities, then, the Faculty Council on Grants and Contract Research proposed that a survey of faculty opinion be conducted in Autumn Quarter, 1978. This report presents the results of that survey.

In cooperation with Professor Fred E. Fiedler, Chair, and Professor Edward B. Perrin of the Faculty Council on Grants and Contract Research, and of Donald R. Baldwin, Director of the Office of Grant and Contract Services, plans for the survey were developed by the Educational Assessment Center, and

funds procured through the support of Dean Ronald Geballe of the UW Graduate School. Other faculty and staff members provided advice and suggestions for content of the survey questions and methodology. To these faculty members and administrators, as well as to the respondents, the EAC owes thanks for assistance in conducting the survey.

Methodology

The sample for the survey was constructed by random selection among regular faculty members (i.e., those holding teaching appointments) at the rank of Assistant Professor and above listed in the Staff Directory for academic year 1979.* An introductory letter (Appendix A) was sent to eligible respondents, followed by a brief screening interview by telephone (Appendix B). Those sample members who reported they were now or had recently engaged in scholarly research as Principal Investigators were requested to set up appointments for face-to-face interviews. The interviewers for the survey were graduate students who were specially trained for the study.

The interview instrument (Appendix C) consisted primarily of open-ended questions designed to elicit unstructured and extensive comments. In this, it was successful; the design failed to anticipate the complexity of the responses. Many responses, for this reason, cannot be easily quantified, and are presented in narrative form as verbatim comments.

The interview responses were content analyzed, translated into machine-readable language and tabulated. Cross-tabulations for variables such as academic rank, college, and field were computed, although small cell populations limited the usefulness of these analyses. In this report, the data are primarily presented as percentages or frequency distributions of the total population. Where differences are found by rank, college, field, etc., these are noted in the text.

*In order to assess the extent of need for and satisfaction with support services, the sample was limited to those who carried primary responsibility for research activities, and who combined research with regularly scheduled teaching.

Response

The relevance and importance of issues of research support was obvious among the sample members. Immediately after receiving the introductory letters, and before the screening telephone calls could be made, a number of respondents called to express their willingness to participate, and refusals were miniscule.* The only substantial reason for non-response appeared to be absence from the campus, and even in these cases, a number of respondents who were on leave set up appointments at their homes, or came into the University in order to participate. Table A shows the response characteristics for the sample.

Table A

Response

Selected for the sample		277
Deceased/ill	2	
On leave/out of area	23	
Not engaged in research	54	
Eligible respondents		198
Interviewed	192	
Refusal	6	

Being ineligible for inclusion in the group of researchers, according to specifications for the sample, however, did not mean that all of these individuals actually did no research. Of the 54 faculty members who reported themselves "Not engaged in research," six participate in studies, although not as Principal Investigators, and 10 others conduct research self-defined as "independent," "on my own time," or "as part of my job." Of those who are not researchers, two

*The response rate, calculated as the number of completed interviews divided by the total number of eligibles, approached 97%, an almost unprecedented figure in conventional survey research.

sample members are close to retirement, one is occupied with a private business, and three members of the Health Sciences faculty state that they are primarily concerned with patient care and clinical practice. Six sample members said that research opportunities in their disciplines are not available or not necessary. Samples of verbatim comments appear on page i of Appendix D.

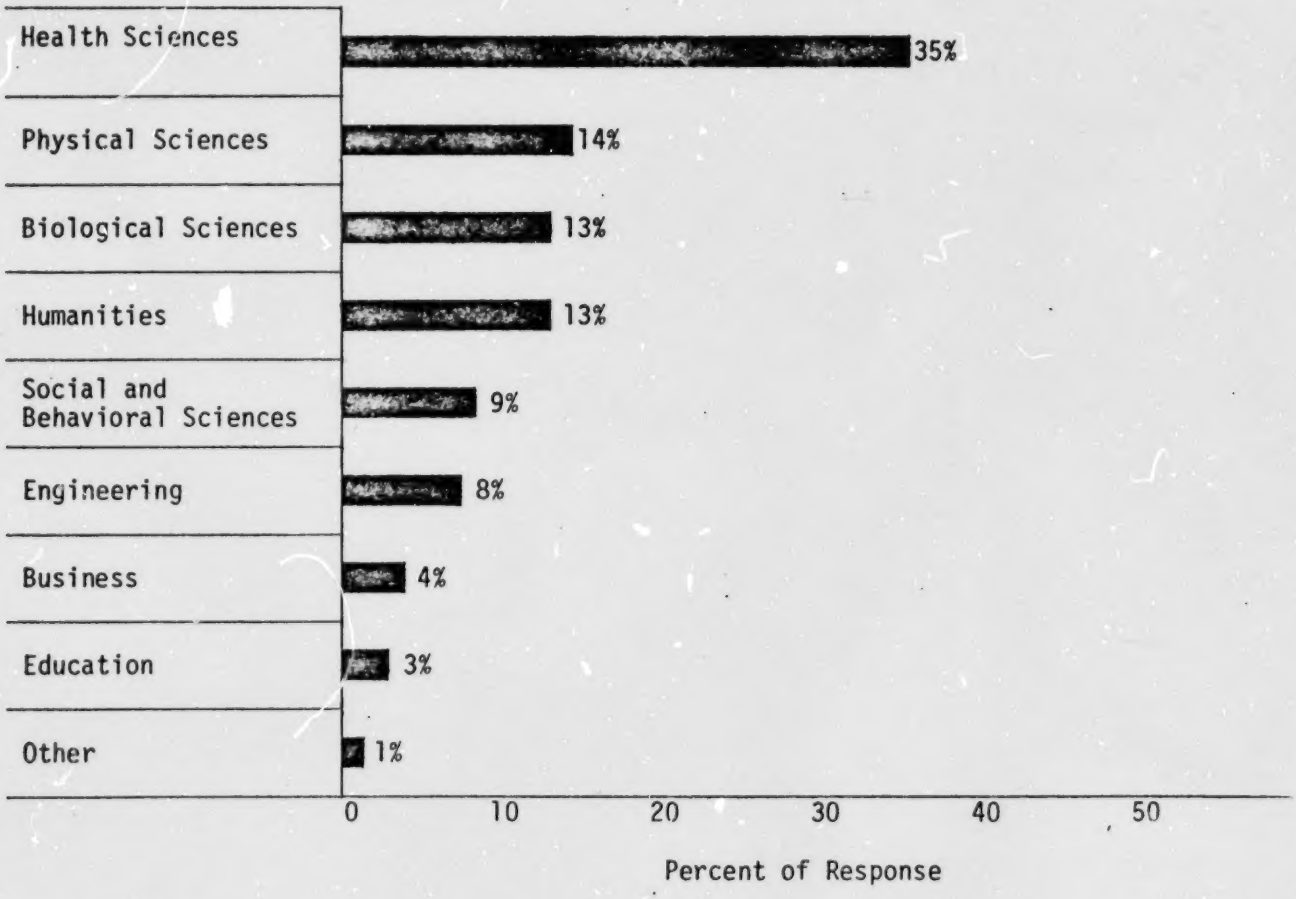
For the largest number of those who report not conducting research, however, the reason for their decision lies in the pressure of other responsibilities. Sixteen said that they were too busy with teaching or writing activities, and five mentioned administrative burdens. The remainder in the non-research group referred to personal factors, or gave no reason. The 54 faculty members who did not report research participation as Principal Investigators were excluded from the remainder of the study, except insofar as their listing in the Directory permits comparison with respondents on basic demographic variables.

Demographic Characteristics

Respondents were identified by general area of discipline, by college membership, and by rank. Figure 1 shows distribution by area.

Figure 1

Distribution of Respondents by Field of Interest

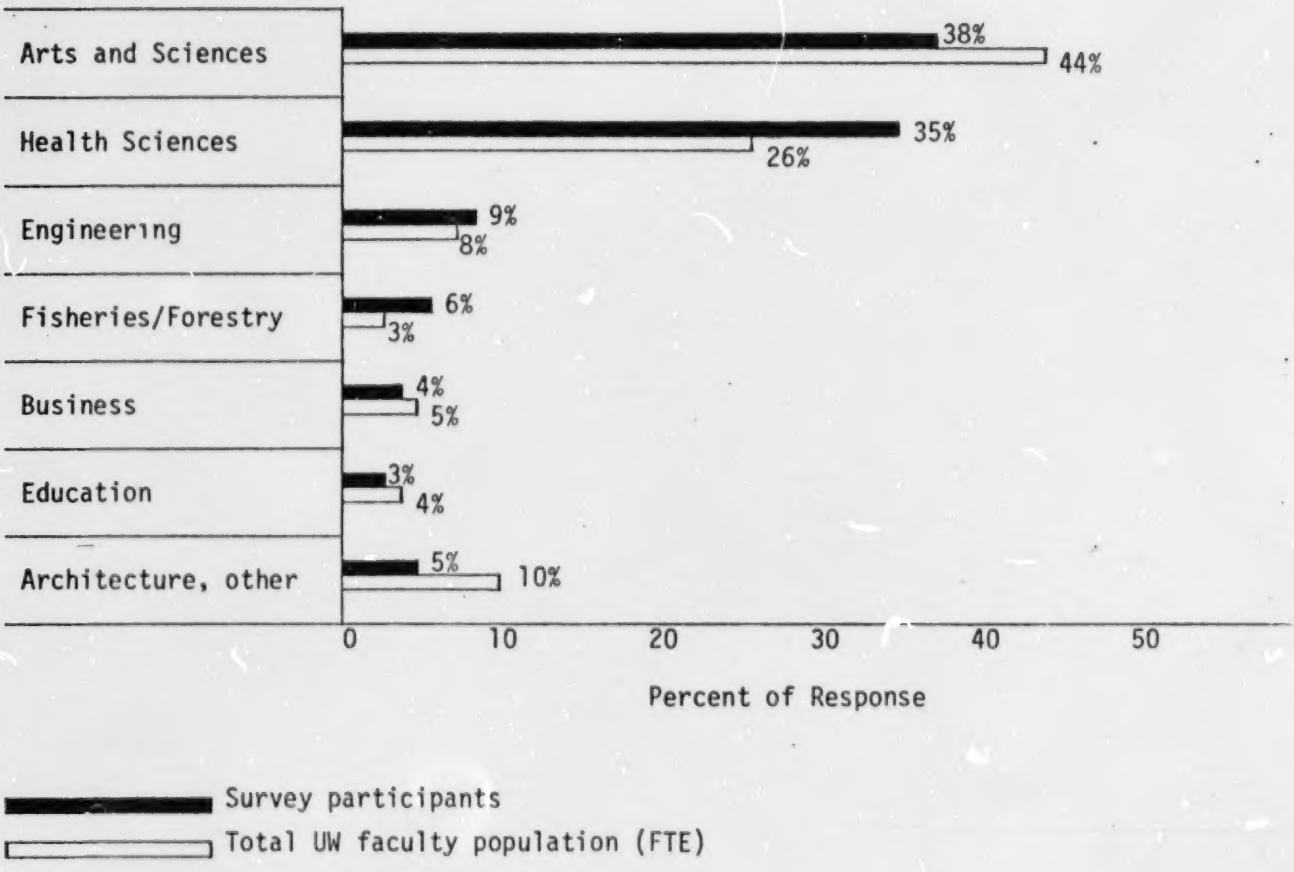


University records do not permit easy comparisons between total faculty population and the survey respondents by discipline. Using existing information on FTE's provided by the UW Budget Office, however, it is possible to approximate the numbers of faculty members by college and by rank.

Compared to the distribution of faculty by college for the UW as a whole in Autumn 1978,* the study respondents were more likely to be found in Health Sciences, Engineering, and Fisheries/Forestry, and less likely to be in Arts and Sciences and other colleges, as Figure 2 indicates.

Figure 2

College**



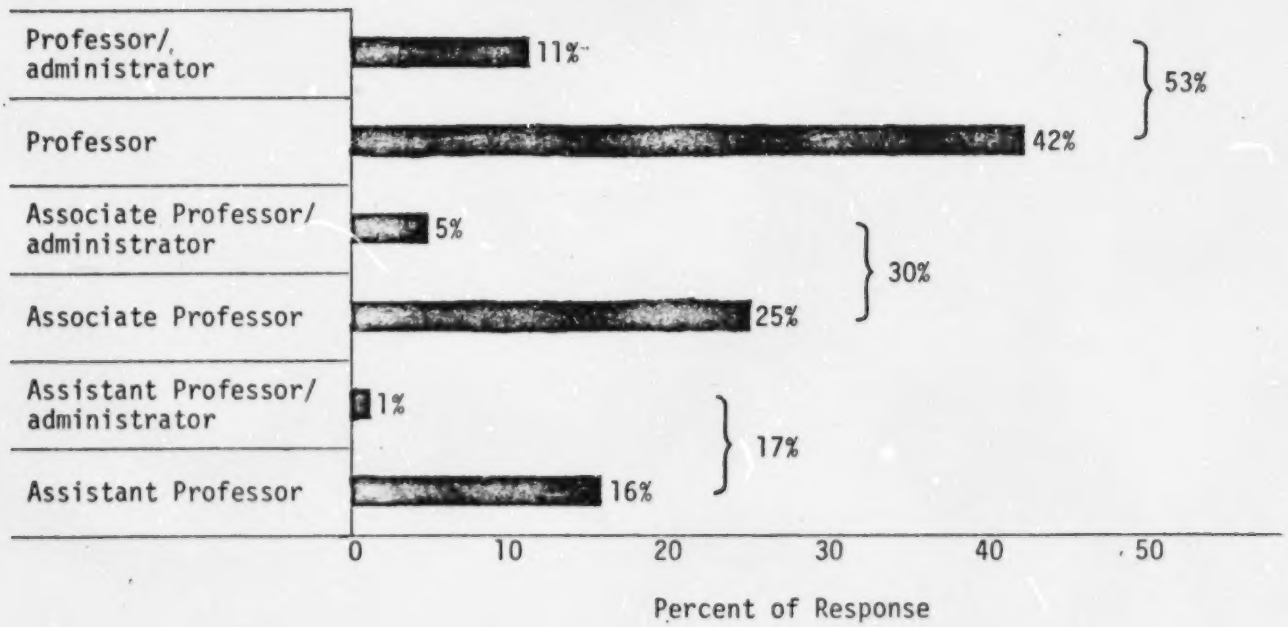
*UW Budget Office information

**For the most part, in the following analyses college is collapsed into Arts and Sciences, Health Sciences, and Other.

Currently available all-University figures for FTE distribution by academic rank as of July, 1978 show the faculty consisting of 30% full professors, 24% associate professors, and 26% assistant professors. The survey respondents were distinguished by administrative position as well as by rank. Combining administrators and other faculty at each rank, Figure 3 indicates that the researchers in the study tended to be higher in rank than would be expected by chance distribution. The classification "Administrator" includes only those faculty members with formal positions in the University hierarchy, such as "Dean," "Chair," etc.

Figure 3

Academic Rank of Respondents



While the small numbers involved call for caution, the distribution of the 54 non-researchers by college suggests that they are less likely to be in Arts and Sciences and Health Sciences than are respondents, and more likely to be found in Engineering, Education, Architecture/Urban Planning, and other colleges.

Results

By definition, all of the respondents were engaged in research as principal investigators, or had been so in the immediate past. Of these faculty members, 86% had either already applied or planned to apply for funding from outside sources, predominantly federal or other governmental agencies. The 27 respondents who gave one or more reasons for not submitting such applications most frequently cited factors related to University or agency procedures or requirements, such as administrative burdens and red tape (9) or overhead rates (4). Others mentioned the obligations of other commitments (6), or inability to obtain leave (2); seven respondents commented that their fields did not interest funding agencies; while another smaller group said that they were fully supported by the University, not interested in seeking outside monies, or stated that in their disciplines, sponsored research "was not how it was done."

The majority of respondents reported submitting multiple applications for funding. At least one of these was most likely to have been granted for researchers in the Health Sciences (80%, versus 63% Arts and Sciences, 59% other colleges). Where requests were denied, approximately one-fourth of the respondents had reapplied or planned to reapply. Those who did not cited lack of time or reluctance to go through red tape, said that they had little expectation of funding because their field did not interest agencies or little money was available, or reported that they had obtained other funds.

There were few services named which would have encouraged or assisted the respondents to reapply after funding was denied. Among these were help in writing and evaluating proposals, administrative assistance, more and better information on proposal requirements and format, and general secretarial services.

While the small cell populations make interpretation difficult, there are indications that administrative responsibilities do not lessen participation in sponsored research by the respondents. All 20 in the full professor/administrator group report having applied for outside funding, while a smaller proportion (80%) of professors without administrative posts have done so. Similar findings appear for associate and assistant professors in the study. Faculty in Arts and Sciences and Health Sciences are most likely to have applied for funding (83% and 85%, respectively) in contrast to the 65% in other colleges who submitted applications.

Possible University services which might encourage researchers to apply for outside funding, or, if this is denied, to reapply, were suggested by a small number of respondents. For the most part, these comments concerned clarification and simplification of procedures, and a need for technical assistance in proposal preparation. Examples of these responses appear on page ii of Appendix D.

A list of actual or potential support services was presented to the respondents, and they were asked to rate the importance of each, to indicate whether it had been used, its source, and the quality of the service obtained. While most of the respondents were willing to rate importance, many were unfamiliar with the services. Table 1 shows mean ratings and the numbers evaluating each service.

Table 1

Mean Ratings of Support Services*

	Importance of Service	Quality of Service Obtained	
Information on available University facilities and resources	2.9	2.1	(N = 67)
Information on sources of funding	2.7	2.4	(N = 73)
Notification (circulation of information) on RFP's	2.8	2.6	(N = 64)
Information on agency requirements	2.6	2.0	(N = 88)
Clerical/secretarial assistance in writing proposals	1.9	2.0	(N = 132)
Accounting assistance in setting up budgets and cost estimates	2.4	1.8	(N = 113)
Duplicating services	2.0	1.8	(N = 132)
Editorial assistance in presenting data in proposals	3.6	1.8	(N = 34)
Notification of current status of proposals and their progress through the granting process	2.9	2.8	(N = 52)
Assistance with reporting, budget monitoring, and accounting	2.3	2.6	(N = 109)

*1 = Highest; 5 = Lowest

Ability or willingness to rate quality, of course, is directly related to experience. The use of the support services by the respondents is shown in Figure 4, and the sources of the services reported by users shown in Table 2. In these citations, "Agency" refers to the funding agency or organization, and "Personal" includes efforts both by the faculty member reporting and by the individuals and non-University sources from which he/she obtains help. As might be expected, the senior faculty report less use of information services than do their less experienced colleagues.

Figure 4

Use of Support Services

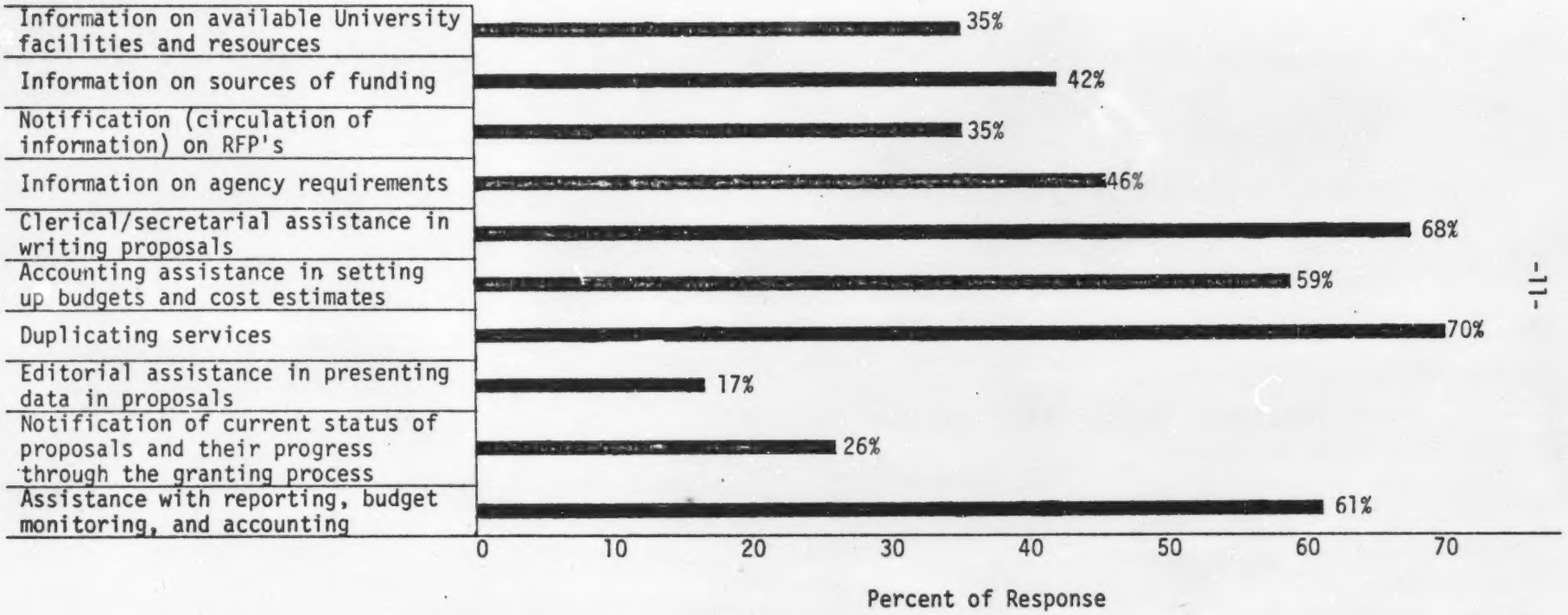


Table 2

Sources of Services Used (Percents Responding)

	Office of Grants & Contracts Services	Department (Laboratory, Center)	College (Institute Graduate School)	Technical (Library, Publications Mail)	Agency	Personal	Other	
Information on available University facilities and resources	5	39	22	15	1	12	6	100%
Information on sources of funding	14	24	34	9	9	9	1	100%
Notification (circulation of information) on RFP's	4	31	35	7	14	5	4	100%
Information on agency requirements	23	38	15	2	17	3	2	100%
Clerical/secretarial assistance in writing proposals	1	82	11	1	4	1	0	100%
Accounting assistance in setting up budgets and cost estimates	13	66	16	0	1	1	3	100%
Duplicating services	0	63	21	12	3	1	0	100%
Editorial assistance in presenting data in proposals	4	39	26	2	2	25	2	100%
Notification of current status of proposals and their progress through the granting process	29	20	15	0	17	12	4	100%
Assistance with reporting, budget monitoring, and accounting	35*	47	11	0	1	1	5	100%

*Includes references to Grants and Contracts Accounting Office.

Primary dependence on the department for most services is reported in all colleges. Respondents in Arts and Sciences appear somewhat less likely to rely on support from their college, for almost all services, than do others. It should be noted, however, that respondents may refer to where they go for service, not necessarily to the actual source of the service itself. Thus, services may be received through, but not from, the respondents' department or college.

In addition to the listed services, respondents were asked to suggest other types of assistance which would be of importance to them. These volunteered items included:

- Literature search and improved access to research materials (5 citations)
- Help with administrative procedures (6 citations)
- Editorial assistance (5 citations)
- Information on proposal writing strategy (4 citations), and
- Seed money for proposal development (4 citations).

The reference to "seed money" was a common one in response to a number of the questions. Described as "slush fund," "a fly wheel," "bootlegging," "carryover money" or any one of a number of other imaginative phrases, the terms referred to some method of providing interim funding, both for proposal development activities, and to sustain core staff and operations between grant funding periods. In later pages of this report the subject recurs under many headings, such as in evaluations of uses of overhead, and as evidence of support or lack of support by University administrative units. There is no doubt that seed money, or the lack thereof, is an urgent and sensitive issue among researchers.

Eighty-four respondents named one or more services which they considered inadequate. Of these, by far the largest number of citations singled out problems in budget accounting and monitoring. Forty-two comments mentioned difficulties in this area, for the most part due to late or inaccurate reporting, or an inability to obtain needed information. Recommendations for improved training and supervision of staff, or for decentralization and more personal control of operations were offered as solutions. The 12 respondents who reported inadequacies in notification of current status and progress of proposals wanted simply more and better information, but a number of these individuals also looked to better staffing for improvement. Other inadequacies were cited by 10 or more respondents in obtaining information on sources of funding, RFP's, and in the provision of clerical/secretarial assistance. For the most part, however, recognition of a problem did not lead to identification of a solution. Other than suggesting that a local (departmental, college) source would be preferable, or that the respondent could go it alone, there were few answers to the question on possible resolution of problems. And local control, like going it alone, probably translates into control by the individual, for his/her immediate convenience and requirements. Examples of responses to this question on inadequacies are given on pages iii-iv of Appendix D.

Respondents were invited to name additional resources which would facilitate proposal development. This question resulted in 128 citations, distributed as shown in Table 3.

Table 3

Suggested Additional Resources for Proposal Development

Technical assistance (editorial, computer, literature search)	24%
Time for proposal development, writing	17%
Information/guidance on procedures	16%
Seed money (travel, conferences)	13%
Secretarial/clerical	13%
Grantsmanship (specialist in proposal writing, contact with agencies and other contractors, representative in Washington, D.C., consultants, etc.)	12%
Facilities, equipment	5%
	100%

It is apparent from these responses that a primary need is seen for the provision of assistance in the mechanical processes of seeking funding. In particular, the need for clerical/secretarial help is seen as more acute in Health Sciences (14%) than in Arts and Sciences or other colleges (5 and 6%, respectively), while time is less a problem in Health Sciences and Arts and Sciences (9 and 6%, respectively) than in other colleges (19%). Specific comments are cited on pages v - vi of Appendix D.

Eighty-five major problems encountered at the UW in applying for or administering sponsored research were reported. The incidence of such problems, as defined by the researchers, is shown in Table 4.

Table 4

Major Problems Reported	(Percent of Response) N = 85
Red tape	19%
Accounting delays, errors	19%
Inadequate space, facilities, or services	13%
Incorrect information or feedback from administrative units	12%
Lack of cooperation within college or department	10%
Purchasing delays, errors	8%
Lack of seed money	8%
Overhead too high	8%
Other	7%
	100%

Utilization of Specific Services and Facilities

Following the first general questions, the interview next addressed a number of specific University units and services which might be used by researchers. For each, the respondents were asked if they had used the unit or service, how they rated its usefulness to them, whether they had had problems in connection with it, what problems had occurred, and how such problems could be resolved. Table 5 shows the numbers of faculty members reporting use of

each unit or service, and their mean ratings of its effectiveness, on a scale where 1 equals Very Well, and 4 equals Very Poorly.

Table 5

Use and Rating of Effectiveness of Units and Services

	Number Reporting Use	Mean Rating
Office of Grant and Contract Services	106	2.0
Human Subjects Office/Human Subjects Review Committee	65*	2.2
Purchasing/Central Stores	134	2.3
University/HEPB Personnel Office	91	2.7
Library Systems	172#	1.6
Computer Centers	98**	1.6
Physical Plant	83	2.2
Duplicating, Printing, and Publications	148	1.5

*n's reported are Human Subjects Office, 4; Human Subjects Review Committee, 27; both, 13.

#n's reported are Health Sciences Library, 20; Suzzallo, 10; others not specified.

**n's reported are Academic Computer Center, 68; John Locke, 16; Academic and Locke, 10; others combined or not specified.

The problems identified and the suggested or desired resolutions vary widely in their degree of specificity, recognition of underlying mechanisms, constraints, and strengths of University operation, and application to general processes. The respondents are most aware, and most articulate about, the particular difficulties and inadequacies that impede their own work. The listings of problems which follow are presented in the respondents' words directly as the respondents gave them, and represent immediate reactions to the

situations described. They are not, and are not meant to be, viewed as other than individual reports of recent experience.

Office of Grant and Contract Services (106 respondents reporting)

Seventy-one problems arising from interactions with the Office of Grant and Contract Services were reported. Unfortunately, in some cases, the respondents were unclear about the functions of this office, and those who cited difficulties having to do with accounting were probably in reality referring to the Grant and Contract Accounting Office. This confusion should be noted in considering the following data. Reported problems with OGCS were:

- Accounting slow or delayed (20 citations)
- Accounting not accurate (10 citations)
- Red tape, restrictions on proposed activities (12 citations)
- Inaccurate, inadequate information (8 citations)
- Services slow or delayed (16 citations)
- Failure to provide guidance (5 citations)

Several respondents, on the other hand, both praised and blamed, or volunteered compliments.

As was true for all areas under study, fewer solutions than problems were given. Possible resolutions for reported difficulties were suggested by 47 respondents. The largest number, 16, recommended improved information delivery and feedback, while decentralization and more personal control over services and improved accuracy and speed were each cited by 10 respondents. Other solutions were: Less restrictive administration of funds (6 citations); better contact with funding agencies (4 citations); and providing assistance in preparation of proposals (3 citations). Examples of these problems and recommendations are shown on pages vii - viii of Appendix D.

Human Subjects Office/Human Subjects Review Committee (65 respondents reporting)

The largest number of problems associated with interactions with the various Human Subjects units were related to the opinion that the requirements imposed were not relevant or were meaningless in the context of the respondents' work. Sixteen of the 42 comments identified such problems, while an additional 11 referred to the review units' "lack of sophistication" about research, implying that greater understanding would lessen the difficulties in compliance. Fourteen comments addressed the issue of added work or delay caused by review unit requirements, without specifically indicating that these requirements were unreasonable or mistaken. Three respondents complained about inconsistency or changes in requirements which caused difficulties in repeating or continuing research activities.

Respondents made 31 suggestions on ways in which these problems might be solved. As would be expected from the expressed concern with lack of understanding on the part of review units, more than half of the solutions centered on educating and informing the review bodies about research needs and special considerations of particular proposals. Sixteen citations dealt with such points. Simplification of procedures was suggested in eight instances, while six called for speeding up review action. One respondent cited decentralization and return of responsibility to the department. Examples of problems reported and solutions suggested appear on pages ix - x of Appendix D.

Purchasing/Central Stores (134 respondents reporting)

The relatively low rating given to operation of the Purchasing and Central Stores units is reflected in the high number of difficulties identified with these services. One-hundred and forty-four problems were mentioned, of which the largest number, 49, refer to slowness and delays in receiving materials, 34 are concerned with lack of accuracy in the selection of requested items, and seven cite lost orders. "Red tape," including the necessity of going through the bidding process, accounts for another 20, and 10 citations are to lack of feedback or information about the progress of orders. The remaining problems were high cost (10 citations); poor location or hours of operation (6 citations); untrained or rude staff (5 citations); and inability to get cost estimates (3 citations).

There were 103 suggestions of ways in which purchasing problems might be resolved. In 22 cases, the recommendation was for streamlining and simplifying procedures, and more efficient operation. A cluster of suggestions included more flexibility and control by the principal investigator (18 citations); going off-campus for purchases (19 citations); and eliminating bidding requirements (11 citations). Better staff training and supervision was suggested by 18 respondents, and there were 10 citations of improving communication and awareness of research needs among the unit's personnel. Finally, there were 4 citations of need for larger or more available inventories. Typical comments on interactions with Purchasing/Central Stores are quoted on pages x - xii of Appendix D.

University/HEPB Personnel System (91 respondents reporting)

The respondents who had used the University/HEPB Personnel system in connection with research activities identified 125 problems they had encountered. For the most part, these concerned issues of job classification (30 citations) or level of skill (30 citations). Researchers reported that the job specifications determined by personnel staff did not correlate with actual requirements for the work, and, when applicants were referred, many were below minimum levels of competence. An associated complaint was that the "rule of three" prevented the choice of an acceptable qualified candidate. Red tape was considered a problem in 12 instances. Respondents also singled out low pay rates and lack of merit increments which discouraged good applicants (13 citations). In the other direction, there were three mentions of pay being too high, or the requirement that accrued leave pay be assumed a burden on grant or contract funds. Two citations were to the difficulty of firing poor workers, and one to a general lack of communication between researchers and Personnel Office staff.

Eighty-six possible solutions to problems with the Personnel system were offered. In order, these encompassed suggestions as to increasing the openness, flexibility and responsiveness of the system (37 citations); allowing principal investigators more control over hiring and promotion (27 citations); improvements in job descriptions and classification (10 citations); salary and merit options (9 citations); and institution of a probationary period or firing procedures (3 citations).

University Library Systems (172 respondents reporting)

Ninety-five problems or difficulties arising from use of the Library Systems were named. Almost two-thirds of these comments centered on inabilities to obtain needed materials, such as a general statement on inadequate collection (31 citations); reference to difficulties in obtaining specialized materials, particularly through inter-library loan (15 citations); or complaints about missing or damaged materials, especially with regard to journals detained at the bindery (13 citations). Other problems were identified as lack of staff to shelve or locate materials (12 citations); inconvenient hours of operation or poor maintenance (9 citations); criticism of the catalog system or organization (8 citations); inconvenient locations of various elements (5 citations); and references to poorly qualified or rude staff members (2 citations).

The 79 solutions suggested most often recommended increased funding (21 citations), or purchase or copying of needed materials (16 citations). Short of procuring or spending more money, the respondents advocated better or more staffing (12 citations); improvements in cataloging (11 citations); decentralization and closer cooperation with faculty (7 citations); control of theft (5 citations); extended hours (4 citations); and better circulation procedures (3 citations), of which one recommended allowing current journals to circulate more freely, and one suggested forbidding any journal circulation whatever.

Computer Centers (98 respondents reporting)

Forty-seven problems having to do with use of one of the University's Computer Centers were named. Of these, 22 citations centered on a lack of capacity, speed, or sophistication in the present equipment. Inefficiencies in business and operating procedures, and inability of the staff to handle unusual or complicated materials were cited by nine respondents each, with an additional citation noting inconveniences caused by changes in operation. Four problems were caused by scheduling delays, with the remaining two citations reflecting dissatisfaction with the cost of services.

Resolution of problems in using Computer Center services most often mentioned improvements in equipment (11 citations). Others of the 34 suggestions called for better staffing and improved consulting services (8 and 4 citations, respectively); reliance on self-service or providing one's own computer (6 citations), or, conversely, increased centralization (2 citations). Finally, there were two references each to improving efficiency of operation and to going off-campus to obtain needed services. Comments on problems with the Computer Centers, and on suggested resolutions appear on page xviii of Appendix D.

Physical Plant (83 respondents reporting)

Considerable dissatisfaction with Physical Plant services was reflected in the 96 problems reported by the 83 respondents who had direct experience with these operations. The largest number of complaints dealt with cost. Twenty-five such problems were mentioned, followed by difficulties caused by inclement temperature of offices, classrooms and laboratories (18 citations), and failure to adapt to on-going activities (16 citations). Slowness in responding and in doing work was cited by 15 respondents, while there were another 14 citations of poor quality or quantity of work performed. Physical Plant

was seen as unwilling to let others do any of the work by three respondents. Finally, poor maintenance and equipment breakdowns were each cited twice.

There were 56 suggestions made for solving problems in relations with Physical Plant services. These can be divided into those advocating systems improvement, and those dealing with solving specific problems. Twelve citations were to management, supervision and training, and five to obtaining more competent workers. Failing this, there were three recommendations for lowering salaries and costs. There were eight citations to utilizing money from overhead for better Physical Plant services, and nine to going off-campus or doing the work individually. On the side of naming specific improvements, there were 10 citations to maintaining the correct temperature, and four to better equipment or methods. Other respondent comments are on page xix of Appendix D.

Duplicating, Printing and Publishing Services (148 respondents reporting)

Respondents named 55 problems in all having to do with duplicating or publishing services. Of these, 51 referred to Duplicating centers, with 20 complaints about slow service, seven concerning high costs, and five noting breakdowns in equipment. Other problems with duplicating centered on poor quality of work (13 citations); inability to obtain cost estimates (3 citations); and incompetent or rude staff members (3 citations). There was one comment on the inconvenience of Duplicating center locations. The difficulties associated with the UW Press and Office of Publications had to do with lack of funding to publish new work (2 comments), and slowness (1 citation).

Thirty-eight suggestions for resolution of problems were offered. Of these, 10 referred to providing better equipment through purchase or repair. There were an additional nine citations to having work done off-campus. Better staffing was cited in 10 instances, and decentralization in five. Single citations were to better scheduling, correcting errors, better quality paper

and improved funding. Examples of comments on these points appear on page xx of Appendix D.

Replacement of Stolen Property

In 54 cases, respondents reported having had equipment stolen from their offices or research sites. In these incidents, 15 of the missing objects were not replaced. One was found by the police and returned, and the respondent did not know what happened to the equipment in three cases. Of the 35 replacements, 20 were procured with grant or contract funds, and eight provided by the department. The respondents' colleges replaced three items, while the respondents themselves personally obtained another four. The mean replacement time was three to four weeks. Equipment loss is most common in Health Sciences (37% reporting).

Asked to comment on the University's procedures and policies on replacing stolen items, six respondents rated them as "Good," although it should be noted that three of these faculty members had reported nothing stolen. More typical were highly negative comments, with most respondents giving some variant on the remark, "There is no replacement procedure or policy." Examples of such comments are found on page xxi of Appendix D.

Overhead

The respondents were asked to rate the adequacy of support provided from overhead for their research activities not covered by direct costs. The ratings were:

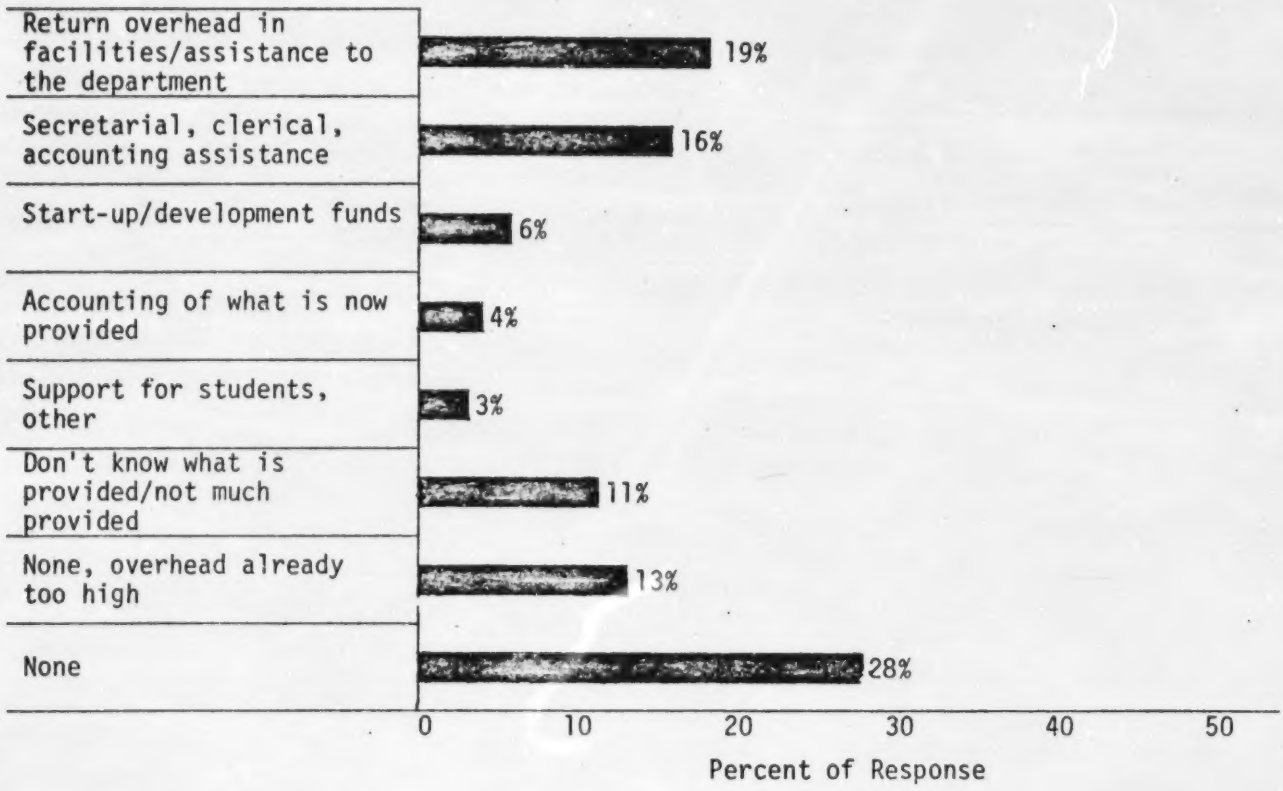
Adequate support	32%
Partial support	27%
Inadequate support	41%

Faculty members in Health Sciences are least likely to consider support adequate.

One-hundred and sixty-seven comments were offered on additional services which might be provided from overhead funding. Not all respondents advocated additions, as Figure 5 indicates.

Figure 5

Suggestions on Additional Uses of Overhead Funds



Additional comments on uses of overhead monies begin on page xxii of Appendix D.

Research Management

In response to a question on whether the researchers had encountered problems of management in administering their research activities, 78 specific difficulties were noted. Of these, 25 were related to satisfying requirements of budgeting/purchasing and accounting procedures, and 23 comments mentioned the time-consuming effort of what was referred to as "administrative red tape." Twelve citations were to problems of personnel administration, and two respondents commented that they were unfamiliar with University procedures. Management in general caused difficulties in 11 instances, and there were five citations of problems in interaction with the public, regulatory agencies, and other University units. Solutions to management problems often depended on finding someone else to solve them; 21 respondents said that they had hired or trained a staff member to handle specialized tasks. Other faculty members, however, mentioned either learning the needed skills (11), or simply sending enough time to do what was necessary (10). Twelve respondents reported that their problems had not been resolved. Examples of management problems and their resolutions begin on page xxiv of Appendix D.

Time and Effort Expenditures

A series of questions asked the respondents to estimate the percentage and number of hours per week they spent doing research, the proportion of their total research supported by outside funding, and the proportion of their research time which involved direct teaching and supervision of students. The median number of hours per week for sponsored respondents was between 16 and 20, while researchers who did not have outside funding reported about 10 hours per week in research. The proportion of time spent in teaching or supervising students by respondents reporting various levels of total research time is shown in Table 6.

Table 6

Numbers of Respondents Reporting Time Spent in Research and in Teaching and Supervision of Students*

Percentage of research time spent in teaching/ supervising students	Percentage of total time spent in research				
	Less than 10	10 - 30	31 - 50	51 - 75	76 - 100
Less than 10	4	16	21	--	4
10 - 30	--	18	23	9	4
31 - 50	2	12	25	10	--
51 - 75	--	2	9	2	--
76 - 100	3	12	8	1	--

*N = 185 reporting both figures

As would be anticipated from the finding that faculty in colleges other than Arts and Sciences and Health Sciences seek and receive less outside funding, respondents in other colleges also report spending less time in research activities.

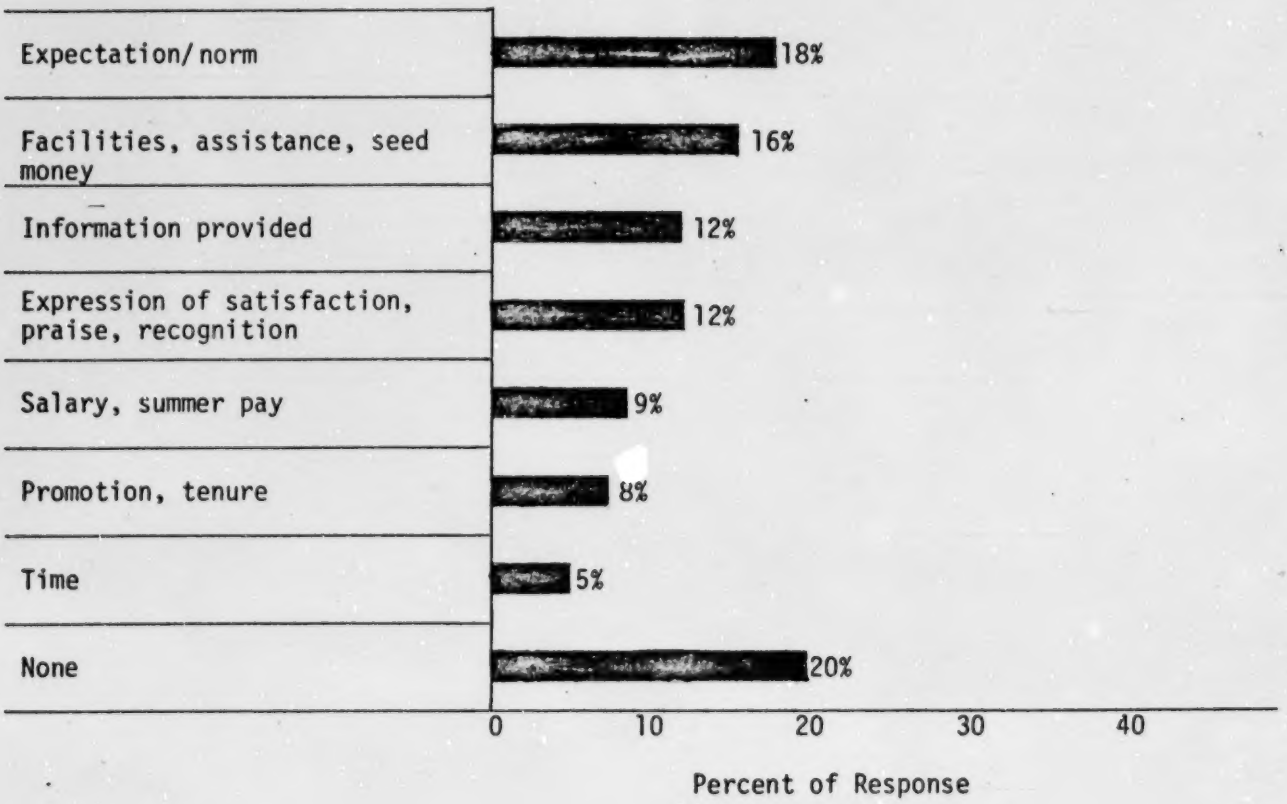
Research Support from Outside Sources

Respondents whose research was funded by outside sources tended to rely heavily on such support. Approximately one-third reported that 90-100% of their research was sponsored, and another third depended on such sources for 50% or more of their research funding.

The respondents were asked to describe ways in which their departments or other administrative units supported and encouraged them in seeking research funds. One-hundred and eighty-three such items were mentioned. The general categories of these reinforcements, not all of them positive, are shown in Figure 7. Examples of the verbatim comments start on page xxvi of Appendix D.

Figure 7

Reported Support and Encouragement by Departments and the University



N = 179

In contrast to the large number of encouragements reported, only 90 respondents cited ways in which they were discouraged from seeking or gaining research funding. Of these negative factors, 29 referred to the pressure of other duties, and 23 to inadequate support or facilities. Examples of such comments are found on page xxviii of Appendix D.

Thirty-six percent of the respondents said that no special reward or recognition was appropriate for researchers who seek grants, while an additional 2% specified that any reward should be for obtaining, not merely seeking, funds. Of those who advocated some tangible recompense, the largest number (18%) said that this should be in money, or (15%) in promotion or job security ("survival"). Ten percent of the respondents named released or paid leave time as the proper reward, while 2% suggested travel or conference attendance, and 2% felt that some reward was warranted, but did not specify what form it should take. The reward, in the view of 7% of the respondents, however, lay in the respect of peers and recognition of a contribution to the discipline. Finally, 8% stated that the award of funding was recompense in itself. Some comments on this question appear on xxix of Appendix D.

Consequences of Seeking/Not Seeking Outside Funding

The researchers were asked "In your discipline, what are the consequences of seeking outside funding for research?" To one respondent, at least, the question was without ambiguity. He answered, literally, "About .05 probability of getting any outside funding." Other respondents, however, interpreted the inquiry more liberally. Their responses indicated that the most likely results would be that research would be possible or facilitated (28%), and that they anticipated recognition and the opportunity to contribute to their fields (23%). Other expectations were that seeking funding would lead to promotion (17%); support for students (7%); invitations to consult or speak (6%); and some enhancement of the reputation of the department or University (4%). Other respondents saw the outcomes more somberly. Ten percent referred to the costs of seeking funds, in time and effort, and 2% felt that the activities distracted them from more valuable pursuits. Finally, 3% said that there were no consequences of seeking outside research support.

Negative consequences were foreseen by the majority of those who responded to a question on the effect of not seeking funding. Thirty-one percent of the comments referred to inability to do research without outside support, and 30% anticipated a loss or delay of promotion as a result. Stagnation and intellectual hardship were predicted by 10%. Other personal effects anticipated were loss of salary (6%); heavy teaching load (4%); or poor facilities and services (4%). Thirteen respondents (6%) felt that teaching would suffer, although 2% said that not seeking grants would permit them to devote more time to other things, among which were teaching. No consequences were expected by 16%.

Respondents in the Health Sciences report receiving the highest level of support in their efforts to obtain funding, followed by those in Arts and Sciences. There does not appear to be differences in support perceived by faculty at different academic ranks. Verbatim comments on consequences start on page xxx of Appendix D.

Relationship of Sponsored Research to University Activities

At the end of the interview, the respondents were invited to comment in general on the relationship of sponsored research to University activities as a whole. The responses were thoughtful, complex, and resist categorization. In brief, the majority of faculty members emphasized strongly that sponsored research should be integrated into the University's operation, as one among a number of equal missions. The precise ratios among these, however, differed in the responses, as each researcher examined the issues. There was concern lest research activities and needs overshadow teaching, at the same time that the contribution of research to education and student support was acknowledged. Benefits to the University, both financial and in prestige, were noted. A sampling of these rich comments are transcribed beginning on page xxxiii of Appendix D.

Discussion

This study was designed to investigate the opinions of faculty on University research support services, and to obtain their suggestions on ways in which their work might be facilitated. The respondents were, by definitions, members of the regular faculty who had acted as Principal Investigators, representing somewhat over three-quarters of the random sample originally selected. There was no lack of interest and cooperation on the part of the respondents, and care was taken to follow good survey research practices. Nevertheless, there may be some erroneous impressions created by the results of the study reported here. Studies such as this one have an unavoidable tendency to accentuate the negative. Not only do the questions encourage respondents to recall and report inconveniences and problems, there are strong incentives to make such complaints. Problems identified and publicized may be solved, whereas respondents have little to gain by praising services with which they are satisfied. Since not all faculty researchers, in addition, use all of the services potentially available to them, deriving clear evaluations from these data is not simple.

Given these conditions, the results cannot be considered as indicating general serious dissatisfaction with services by their users. In a rating of the various services on a scale of 1 to 5, where 1 is the high pole, no service received a mean rating lower than 2.8, based on evaluation by respondents using that service. There is no way, unfortunately, to determine whether delivery of the service saturates the need; that is, whether everyone who needs, or can use, a particular service in fact even attempts to obtain it. The respondents tend to look to their departments to supply services, regardless of whether this source is an appropriate or efficient supplier. There is a good chance that at least some of the problems reported may rise from efforts to obtain services from units not best suited to provide them.

The support services most often requested are in areas which might be called the mechanics of research administration, most often expressed in terms of improved information and consulting. Respondents want the University to provide skilled assistance in proposal writing, editing, and guidance through the procedures of applying for and managing research. In particular, many researchers ask for quite specific instructions and guidelines on operating within the UW system. There are also frequent references to the need for "grantsmanship;" suggestions included maintaining a lobbyist, importing special consultants on proposal development, and facilitating, through conference attendance, mentor relationships, free telephone calls, newsletters, and similar formal and informal channels of communication, access into the reputed network of knowledge about funding sources.

Many respondents emphasize their preference for complete personal control over their research operations. In part, this may represent unfamiliarity with some of the legal or administrative constraints under which the University is bound to work. Individual faculty members probably know that they cannot circumvent the provisions of state or federal regulations, but this does not make following the rules more palatable. Better communication with administrative offices was recommended by a number of faculty members. Institutionalizing more frequent exchanges of information between researchers and administrators would undoubtedly serve to explain the requirements of both to each other, and could well lessen some of the difficulties reported. Preparation and distribution of procedural manuals by service units would be valuable. It might also be useful to schedule information meetings or question-and-answer sessions where researchers could discuss in advance the solutions to potential problems with service agencies, prior to undertaking activities.

It is conventional to end a report by concluding that more information and better communication will alleviate difficulties. In this case, as in others, however, it is probably true. Faculty members engaging in research, and the service units of their parent university are not working at cross-purposes. Simplifying and clarifying the needs of both groups is possible and necessary. The cooperation of faculty and administrative units in this study, for example, will permit some immediate steps toward improving research operations to be taken.